



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---|-------------|----------------------|---------------------|------------------|
| 10/765,767 | 01/26/2004 | Jean Ravatin | 859063.559 | 1930 |
| 38106 | 7590 | 06/10/2005 | EXAMINER | |
| SEED INTELLECTUAL PROPERTY LAW GROUP PLLC 701 FIFTH AVENUE, SUITE 6300 SEATTLE, WA 98104-7092 | | | NGUYEN, KHAI M | |
| | | | ART UNIT | PAPER NUMBER |
| | | | 2819 | |

DATE MAILED: 06/10/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/765,767

Applicant(s)

RAVATIN ET AL.

Examiner

Khai M. Nguyen

Art Unit

2819

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 26 January 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-22 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-12, and 18-22 is/are rejected.
- 7) ☒ Claim(s) 13-17 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☒ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 1/26/2004.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Priority

1. Acknowledgment is made of applicant's claim for foreign priority based on an application filed in France on 01/28/2003. It is noted, however, that applicant has not filed a certified copy of the 03/00933 application as required by 35 U.S.C. 119(b).

Information Disclosure Statement

2. The information disclosure statement (IDS) submitted on 1/26/2004 is in compliance with the provisions of 37 CFR 1.97. Accordingly, the information disclosure statement is being considered by the examiner. An initiated copy of the considered IDS is accompanied with this Office Action.

Drawings

Figure 1 should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g). Corrected drawings in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

Art Unit: 2819

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-12, and 18-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over the applicants' admitted prior art (Fig. 1) in view of Nystrom et al. (US 2002/0190810 A1) (hereinafter referred to as "AAPA" and "Nystrom", respectively).

Regarding claim 1, AAPA (see Fig. 1) discloses the circuit of claimed invention of claim 1 which includes: the correction means (4), and digital automaton (14) (see the description of Fig. 1). The Fig. 1 does not show the means (22 & 24 – see Figs. 2-3) for, during the setting phase, reducing the value of the at least one capacitor (of the filters 8 & 10) with respect to its normal operating value. Nystrom discloses an RC filter (see Figs. 1-2, and 4), wherein the characteristic (including its capacitance, resistance, time constant, and its cut-off frequency - the cut-off frequency of an RC filter depends on its time constant) of the RC filter can be altered/varied by decreasing or increasing the capacitance values (between C_{min} to $C_{min}+7,0C$ – see page 2, the right column, lines 5-20) of the filter (see and compare Figs. 1 & 3 of Nystrom with Figs. 2 & 5 of this application). Therefore, it would have been obvious to one person having ordinary skills in the art to change/substitute the filters 8/12 of the AAPA (Fig. 1) with the tunable filter as suggested by Nystrom (Figs. 1-2 and 4) because having this tunable filter in Fig. 1 of the AAPA, the time constant of the filter can be varied/monitored (see [0002]).

Regarding claim 2, Nystrom also discloses the means (filter 201) for reducing (from $C_{min}+7,0C$ to C_{min}) the capacitance of the filter including means (the controllable

Art Unit: 2819

switches – S11...S13), during the setting phase, reducing the value of each capacitor with respect to its normal operating value (see Fig. 1).

Regarding claim 3, Nystrom also discloses the means (filter 201) for reducing (from $C_{min}+7,0C$ back to C_{min}) the capacitance of the filter including means (the controllable switches – S11...S13) for switching at least one capacitor of value smaller than the normal operating value of said at least one capacitor.

Regarding claim 4, Nystrom discloses the circuit of claim 1 wherein said at least one capacitor is formed of a capacitor of small value connected in parallel to a plurality of small capacitors each series-connected to a respective programmable switch, and wherein the means for reducing the value of said at least one capacitor is capable of controlling the turning-off of the programmable switches (Figs. 1 & 3 and the text).

Regarding claims 5-8, these claims are associated with the apparatus of claims 1-4, therefore, they are similarly rejected for the same reason as above.

Regarding claim 9, the AAPA and Nystrom teaches the claimed invention of claim 9 (see the rejection of claim 1 for more detail), wherein the setting element (the parallel capacitors C11-C13) coupled to a filter (R1 and C_{min}) for altering (reducing/increasing), during a setting phase, the value of at least one capacitor with respect to the capacitor's normal operating value.

Regarding claims 10-11, Nystrom discloses the RC filter including: an input terminal (A) and an output terminal (AF), a resistor (R1) coupled between the input and output terminals of the filter (201), and the capacitor (C13) having a first terminal coupled to the output terminal and a second terminal coupled to ground, wherein the

Art Unit: 2819

setting element includes: another capacitor (C11/C12) of smaller value relative to the capacitor of the filter and having a first terminal coupled to the output terminal of the filter, a first switch (S11...S13) coupled between a second terminal of the another capacitor and ground, and a second switch (S11...S13) coupled between the second terminal of the capacitor of the filter and ground.

Regarding claim 12, the AAPA (Fig. 1) includes the claimed converter (18), the automaton (14), and the switch (20).

Regarding claim 18 & 22, AAPA (see Fig. 1) discloses the circuit of claimed invention of claim 1 which includes: the correction unit (4), digital automaton unit (14), the switch (20), an amplifier/integrator (see the description of Fig. 1). The Fig. 1 does not show the setting element (22 or 24 – see Figs. 2-3) for, during the setting phase, reducing the value of the at least one capacitor (of the filters 8 & 10) with respect to its normal operating value to increase the cut-off frequency. Nystrom discloses an RC filter (see Figs. 1-2, and 4), wherein the characteristic (including its capacitance, resistance, time constant, and its cut-off frequency – because the cut-off frequency of an RC filter relates to or depends on its time constant) of the RC filter can be altered/varied by decreasing or increasing the capacitance values (between C_{min} to $C_{min}+7,0C$ or from $C_{min}+7,0C$ back to C_{min} – see page 2, the right column, lines 5-20) of the filter (see and compare Figs. 1 & 3 of Nystrom with Figs. 2 & 5 of this application). Therefore, it would have been obvious to one person having ordinary skills in the art to change/substitute the filters 8/12 of the AAPA (Fig. 1) with the tunable filter as suggested by Nystrom (Figs. 1-2 and 4) because having this tunable filter in Fig. 1 of

Art Unit: 2819

the AAPA, the time constant or cut-off frequency of the filter can be varied/monitored (see [0002]).

Regarding claims 19-20, Nystrom's filter including: an input terminal and an output terminal (A, AF); a resistor (R1) coupled between the input and output terminals of the filter; and at least one capacitor having a first terminal coupled to the output terminal and a second terminal coupled to ground, wherein the setting element includes: another capacitor of smaller value relative to the at least one capacitor of the filter and having a first terminal coupled to the output terminal of the filter, a first switch (S11/S12/A13) coupled between a second terminal of the another capacitor and ground, and a second switch (S12/S13/S11) coupled between the second terminal of the capacitor of the filter and ground.

Regarding claim 21, Nystrom discloses that the switches of the above claims are controllable switches.

Prior Art

4. The prior art made of record and not relied upon is considered pertinent to applicant's disclose (see the cited reference on PTO-892 Form accompanied with this Office Action).

Allowable Subject Matter

5. Claims 13-17 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Art Unit: 2819

Contact Information

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Khai M. Nguyen whose telephone number is 571-272-1809. The examiner can normally be reached on 9:00 - 5:30 Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Tokar can be reached on 571-272-1812. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

KN
June 2, 2005


PEGUY JEANPIERRE
PRIMARY EXAMINER